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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/394,428	09/13/1999	CHARILAOS CHRISTOPOULOS	2466-35	4221

7590 10/29/2002

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ARLINGTON, VA 22201

EXAMINER

SEFI, BEHROOZ M

ART UNIT	PAPER NUMBER
2613	

2613

DATE MAILED: 10/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/394,428

Applicant(s)

CHRISTOPOULOS ET AL. 

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 30 July 2002.
- 2a)  This action is **FINAL**.                      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-26 is/are pending in the application.
  - 4a) Of the above claim(s) 5-8 is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-2, 4, 9-12, 14-16, 18-23, 25 and 26 is/are rejected.
- 7)  Claim(s) 3, 13, 17 and 24 is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some \*    c)  None of:
    - 1.  Certified copies of the priority documents have been received.
    - 2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a)  The translation of the foreign language provisional application has been received.
- 15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4)  Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5)  Notice of Informal Patent Application (PTO-152)
- 6)  Other:

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## DETAILED ACTION

### *Response to Amendment*

Response to remarks:

With respect to the Applicant's argument (Paper No. 8, page 15),

Applicant's points are read and understood, however the present claims don't exclude the direct calculation of DCT of size N, simply put Lee '345 teaches (along with DCT of size N) and multiple DCTs of N/2 being combined to produce DCT of size N. Thus the broad limitations have been met. Since the amended claims does not add any patentable distinction to the original claims and is only in a different formats and wording, the grounds for rejecting claims 1 – 2, 4, 10 – 12, 14 – 16 and 18 - 21 still applies for the same reason as stated in the previous Office Action (Paper No. 5, dated Feb. 13, 2002).

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9, 22 – 23 and 25 - 26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 5,107,345) in view of Zhu (US 5,870,146).

Regarding claims 9, 22 - 23, Lee '345 the claimed limitations are substantially similar to claim 1, as discussed in previous Office Action (Paper No. 5), Lee '345 teaches transmission and compression of digital image (i.e. fig. 6, col. 1, lines 9+), and

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block conversion and adaptive block size DCT technique and dividing block (i.e. col. 8, lines 30+), and the claimed "selecting from the calculated coefficients . . . . ." (i.e. col. 2, lines 43+), and non-overlapping blocks  $N \times N$  (i.e. col. 4, lines 8+) and (col. 1, lines 61 – 62 of Zhu 146).

Lee '345 fails to explicitly teach the use of "transcoder".

However, the above claimed limitation is well-known in the art as evidenced by Zhu '146, in particular (i.e. fig. 6, transcoder 40, cols. 2 - 3, lines 64+) teaches transcoder convert the rate of bit-stream to the desired bit-stream based on the user or channel.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Lee '345 , as taught by Zhu '146 for the benefit of scaling based on the user protocol.

Examiner Note; DCT is a block converter, thus converts blocks based on the desired ratio and application (i.e.  $N \times N$  or  $N/2 \times N/2$  or  $N \times M$ ,  $N$  is not equal to  $M$  and etc.).

Regarding claims 25 – 26, the claimed limitations are substantially similar to claims 22 – 23, therefore the grounds for rejecting claims 22 – 23 also apply here. Furthermore, for the additional limitation as claimed "multi-node control unit" please see (i.e. col. 3, lines 6+ of Zhu '146).

### ***Allowable Subject Matter***

3. Claims 3, 13, 17 and 24, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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4. The following is a statement of reason for the indication of allowable subject matter: Although Lee '345 teaches the equation common to claim 3 (equation 1), Lee '345 fails to teach the other equations and steps and their specific variables.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

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**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**


**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. S.

10/24/2002

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600